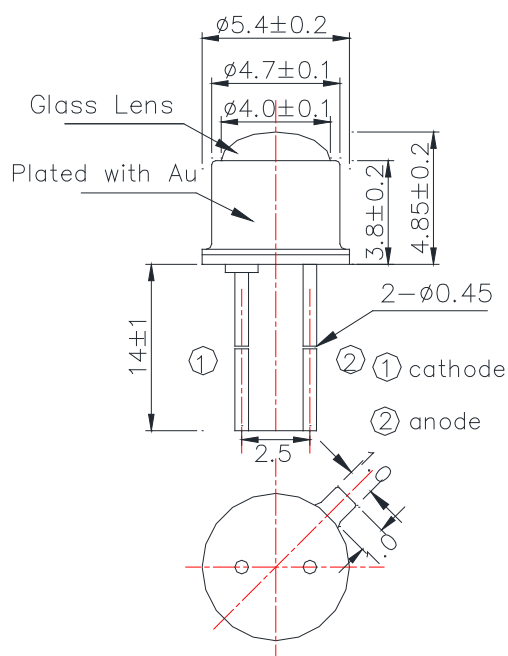


L1050-35K42L

Stem type LED Lamp

Outline and Internal Circuit



(Unit : mm)

Features

- Non-hermetic TO CAN package
- Chip Material : InGaAsP
- Chip Dimension : 300um * 300um
- Number of Chips : 1pc
- Stem: TO-46 type
- Lens : Unspherical Glass
- Cap : Gold Plated

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Power Dissipation	PD	130	mW
Forward Current	IF	100	mA
Pulse Forward Current	IFP	1000	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	300	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Soldering Temperature	TSOL	250	°C

‡Pulse Forward Current condition : Duty 1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 5 seconds at 250°C and is allowed in the area apart 3mm from the bottom of the lamp.

Optical and Electrical Characteristics (Tc=25°C)

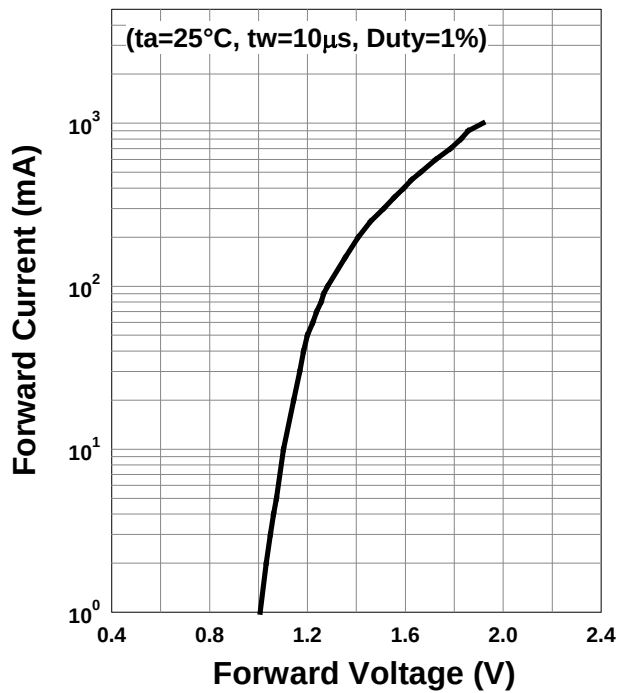
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF		1.2	1.3	V	IF=50mA
	VFP		1.9			IFP=1A
Total Radiated Power	PO		2.2		mW	IF=50mA
			13			IFP=1A
Radiant Intensity	IE		40		mW/sr	IF=50mA
			220			IFP=1A
Peak Wavelength	λ_p	1000		1100	nm	IF=50mA
Half Width	$\Delta\lambda$		50		nm	IF=50mA
Viewing Half Angle	$\theta_{1/2}$		±6		deg.	IF=50mA
Rise Time	tr		80		ns	IF=50mA
Fall Time	tf		30		ns	IF=50mA

‡ Radiated Power is measured by G8370-85.

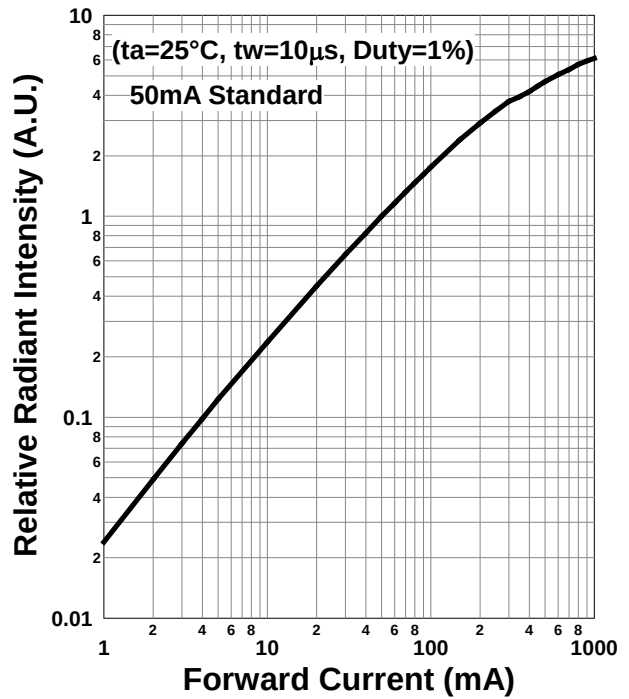
‡ Radiant Intensity is measured by Ando Optical Multi Meter AQ2140 & AQ2742.

Typical Characteristic Curves

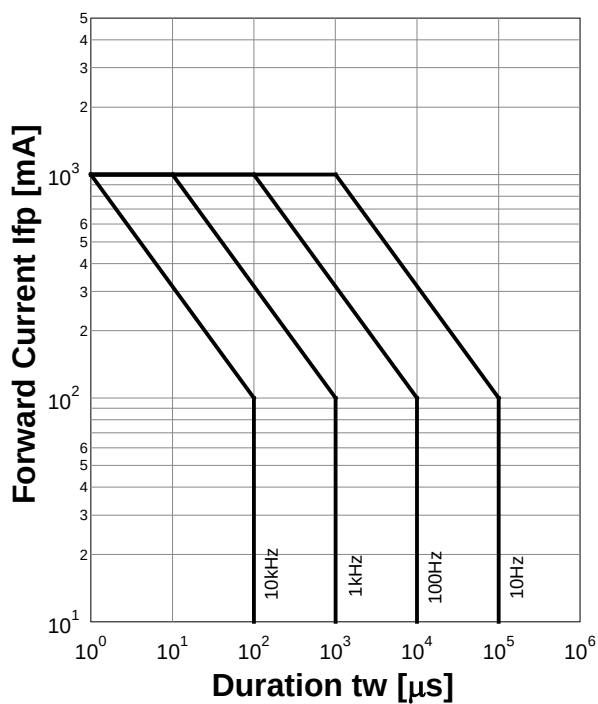
Forward Current - Forward Voltage



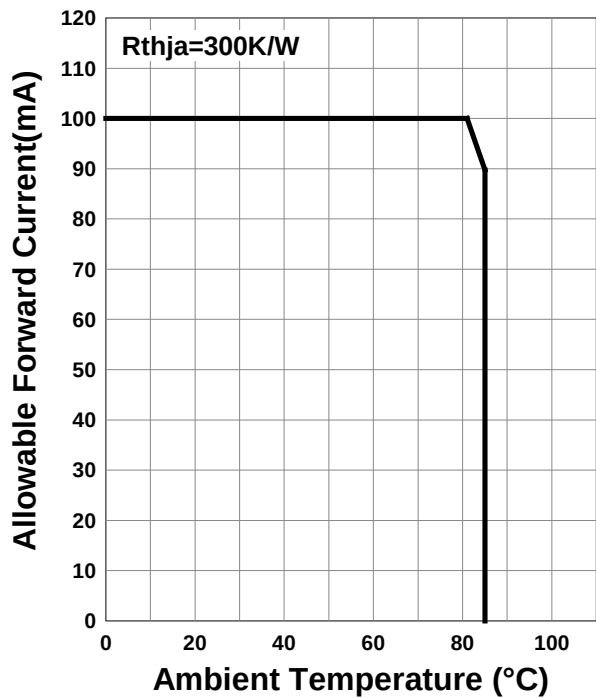
Relative Radiant Intensity - Forward Current

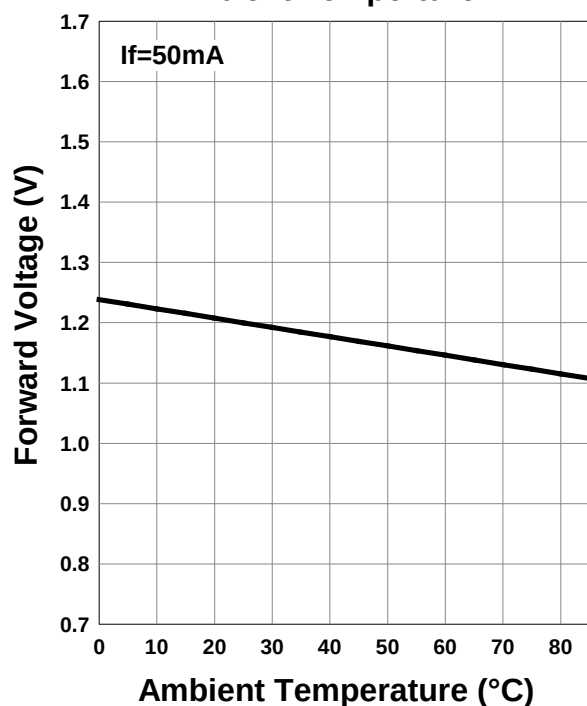
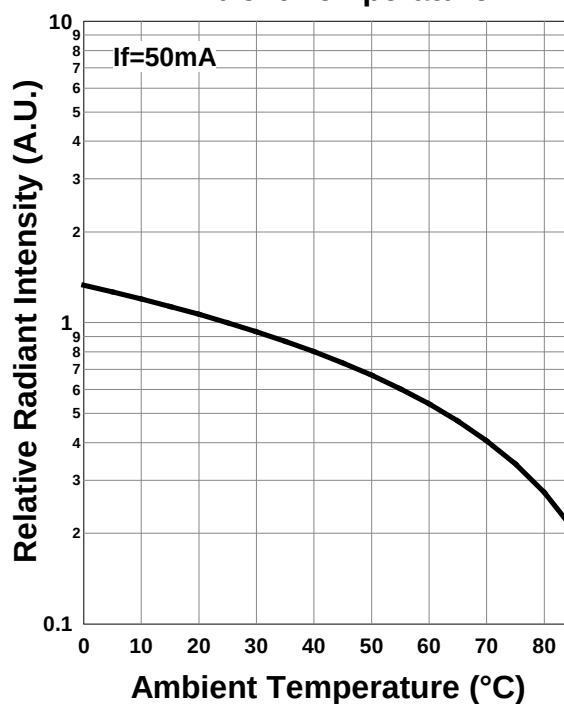
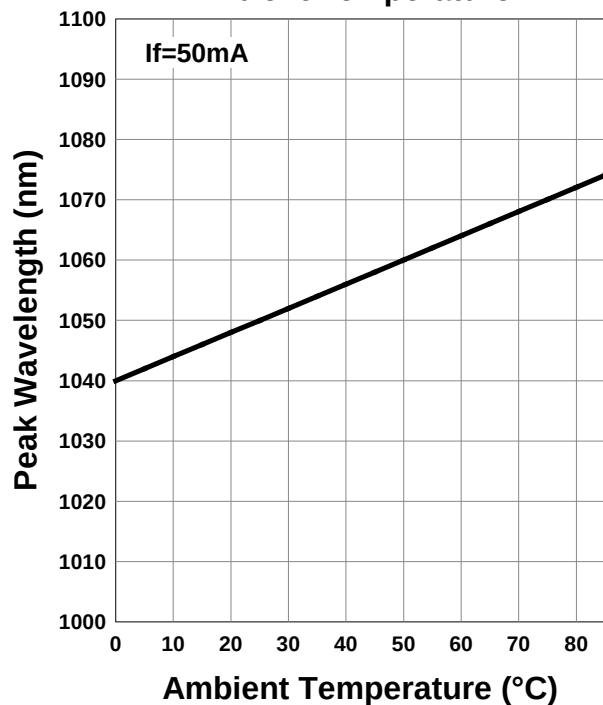


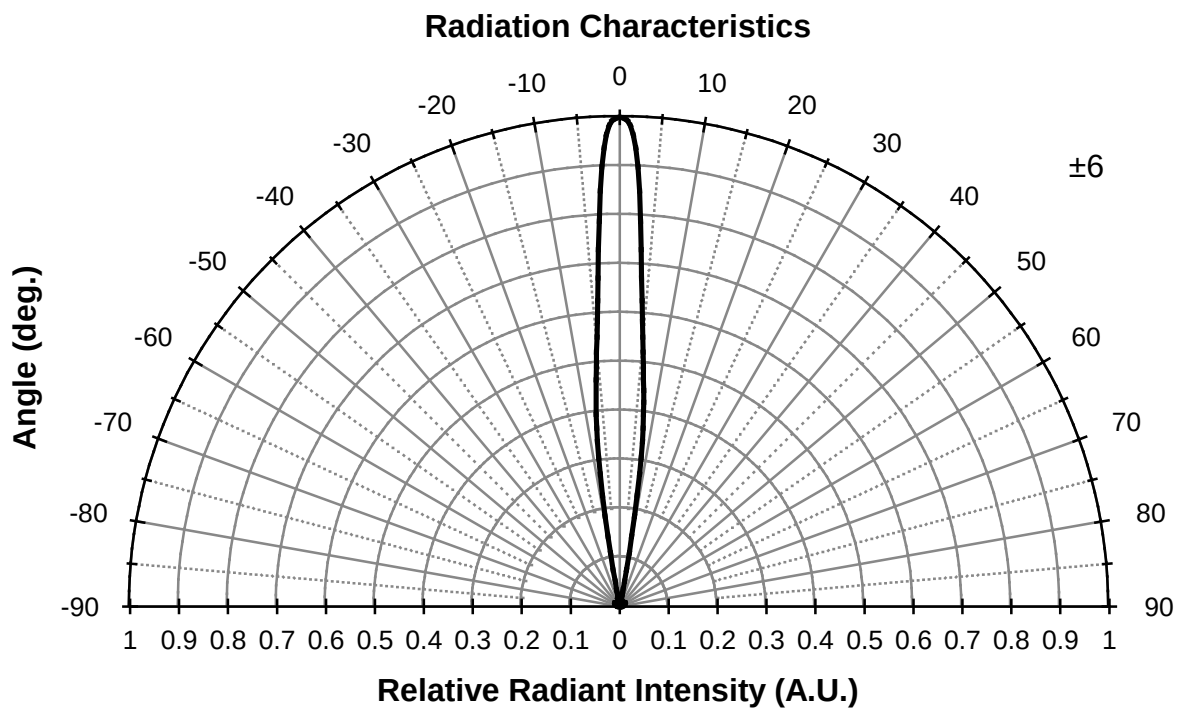
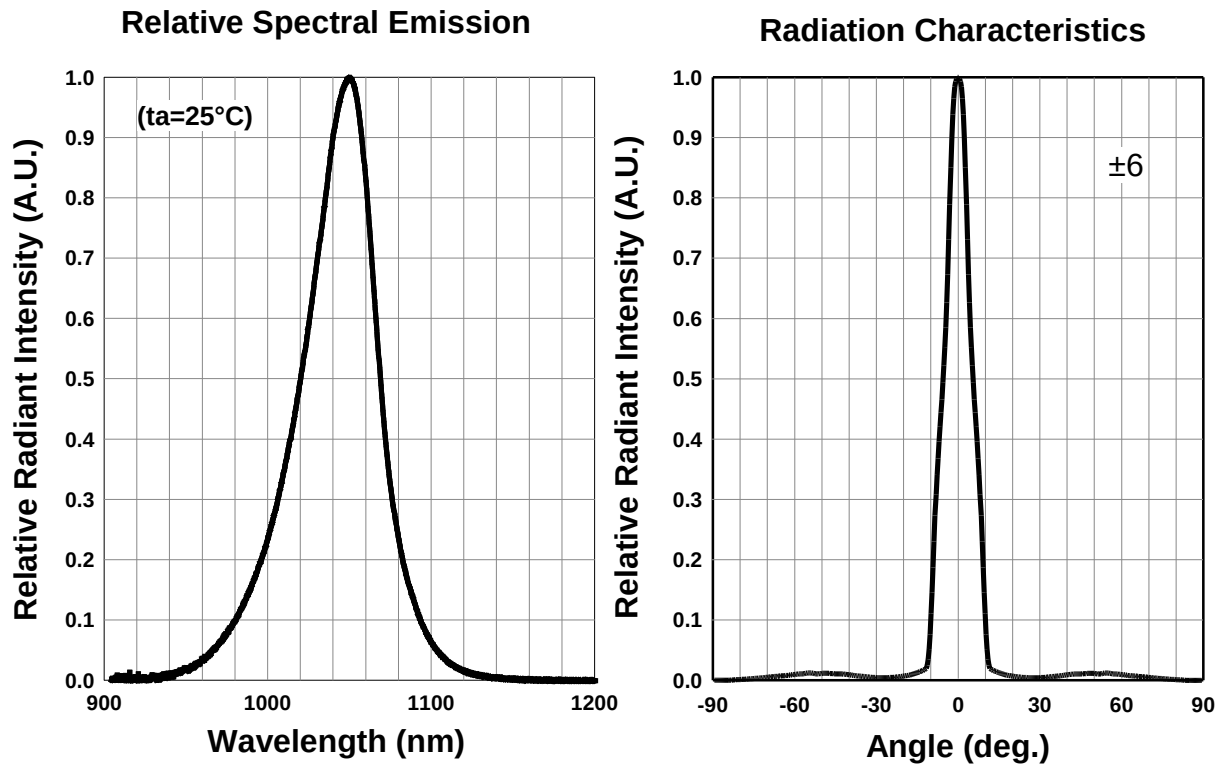
Forward Current - Pulse Duration



Allowable Forward Current - Ambient Temperature



**Forward Voltage -
Ambient Temperature****Relative Radiant Intensity -
Ambient Temperature****Peak Wavelength -
Ambient Temperature**



Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements.

Product data and parameters may vary by user application and over time.

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